



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B58/P1 BYPASS RATIO: 9.2
 UNIQUE ID NUMBER: 12GE149 PRESSURE RATIO (π_{00}): 37.1
 COMBUSTOR: TAPS
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 271.3

REGULATORY DATA

| CHARACTERISTIC VALUE: | HC | CO | NO _x | SMOKE NUMBER |
|--|-----|------|-----------------|--------------|
| D _p /F ₀₀ (g/kN) or SN | 1.6 | 34.1 | 28.5 | 9.8 |
| AS % OF ORIGINAL LIMIT | 8.1 | 28.9 | 25.0 | 54.4 |
| AS % OF CAEP/2 LIMIT (NO _x) | | | 31.2 | |
| AS % OF CAEP/4 LIMIT (NO _x) | | | 35.1 | |
| AS % OF CAEP/6 LIMIT (NO _x) | | | 39.0 | |
| AS % OF CAEP/8 LIMIT (NO _x) | | | 44.3 | |

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

| MODE | POWER SETTING (%F ₀₀) | TIME (minutes) | FUEL FLOW (kg/s) | EMISSIONS INDICES (g/kg) | | | SMOKE NUMBER |
|--|-----------------------------------|----------------|------------------|--------------------------|-------------|-----------------|--------------|
| | | | | HC | CO | NO _x | |
| TAKE-OFF | 100 | 0.7 | 2.033 | 0.02 | 0.24 | 18.86 | 0.0 |
| CLIMB OUT | 85 | 2.2 | 1.683 | 0.02 | 0.80 | 11.67 | 0.0 |
| APPROACH | 30 | 4.0 | 0.567 | 0.07 | 3.60 | 8.48 | 2.6 |
| IDLE | 7 | 26.0 | 0.200 | 0.84 | 21.97 | 4.22 | 0.0 |
| LTO TOTAL FUEL (kg) or EMISSIONS (g) | | | 756 | 278 | 7548 | 6673 | - |
| NUMBER OF ENGINES | | | | 1 | 1 | 1 | 1 |
| NUMBER OF TESTS | | | | 3 | 3 | 3 | 3 |
| AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX) | | | | 1.0 | 27.8 | 24.6 | 7.6 |
| SIGMA (D _p /F ₀₀ in g/kN, or SN) | | | | 0.1 | 0.6 | 0.0 | 2.0 |
| RANGE (D _p /F ₀₀ in g/kN, or SN) | | | | 0.97-1.09 | 27.29-28.44 | 24.58-24.63 | 5.26-8.96 |

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT All POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT All POWER SETTINGS

ATMOSPHERIC CONDITIONS

| | |
|----------------------|-----------------|
| BAROMETER (kPa) | 97.4-98.6 |
| TEMPERATURE (K) | 280.5-299 |
| ABS HUMIDITY (kg/kg) | 0.00345-0.00716 |

FUEL

| | |
|----------|-------|
| SPEC | Jet A |
| H/C | 1.89 |
| AROM (%) | 15.3 |

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: General Electric Company
 TEST LOCATION: PTO, Ohio
 TEST DATES: 29/09/2009-03/10/2009

NO_x REGULATION PARAGRAPH

| | |
|---|-------------------|
| | 2.3.2 c) (CAEP/4) |
| | 2.3.2 d) (CAEP/6) |
| x | 2.3.2 e) (CAEP/8) |

REMARKS

1. Ref. GE REPORT R2010AE595
2. Engine S/N 956-108/2
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)